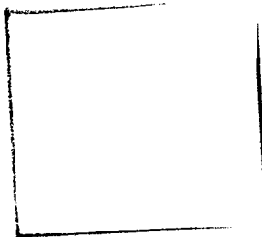


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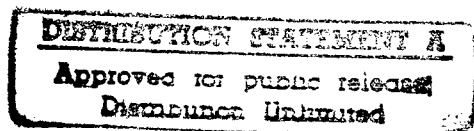
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By A. Vorob'yeva and M. Demchenko

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## FOREWORD

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# SCIENTIFIC CONFERENCE IN BUDAPEST ON LABOR PRODUCTIVITY PROBLEMS

[Following is a translation of an article by A. Vorob'yeva and M. Demchenko in Voprosy Ekonomiki (Problems of Economics), No. 3, Moscow, March 1960, pages 154-160.]

In the fall of 1959 a scientific conference was organized in Budapest by the Department of Sociohistorical Sciences and the Institute of Economics of the Hungarian Academy of Sciences. Taking part in the conference were economists and statisticians from Bulgaria, Hungary, the GDR [German Democratic Republic], Poland, Rumania, the USSR, and Czechoslovakia. Representatives of these countries presented papers on theoretical and methodological questions, exchanged experiences in planning and calculation, and communicated on practical measures related to increasing the productivity of labor. Great attention was given to the question of determining the content, indices, and methods of measuring and planning, and international comparisons of labor productivity. In reports and presentations were communicated factors of the increase of labor productivity, general tendencies and courses of the economy of materialized labor, and the dynamics of the productivity of labor in industry and agriculture of the various countries. The introductory report was made by the Director of the Institute of Economics of the Academy of Sciences of the Hungarian Peoples' Republic, Academician I. Frish. He illuminated the targets and tasks placed before the conference participants. Taking part in its work was I. Fok, Member of the Politburo of the TsK (Central Committee) of the Hungarian Socialist Workers Party.

O. Gado and I. Kheten'i (Gosplan of the Hungarian Peoples Republic) made a report concerning some questions of national economic planning of the productivity of labor in industry. They reported that the transition to a planned economy in the Hungarian Peoples Republic was marked by significant successes in the area of labor productivity. As a whole in industry, gross output per worker for the period 1949-1958 rose by 68%. The unevenness in the rates of growth of labor productivity, as the authors noted, is explained by the various conditions of economic and political development of the country in different periods. The highest rates of growth (13% in a year) were for the period up to 1958, that is, the period following nationalization of industry and the carrying out of measures concerned with the most rational specialization of enterprises.

After some stagnation, in particular as a result of the damage caused by the counterrevolution in 1956, the level of the productivity of labor again rose by 8% and in 1959 (according to preliminary data) by 5%. For the whole period 1949-1958 one half of the rise of gross output and one third of the rise in net output was secured through the rise in the productivity of labor. This is recognized to be unsatisfactory and in the period of the Second Five-Year Plan the task has been put to achieve an overall rise in output of 60-70% through increasing labor productivity.

In investigation of the factors which determine such an increase considerable attention was given to the complex mechanization and automation of production. In the report of L. Bonto (Gosplan, Hungarian Peoples Republic) these questions were surveyed in application to the chemical industry of Hungary. For example, it was shown that, in the production of pneumatic tires, with an increase in the degree of automation from 0.2 to 0.5 the requirement in the labor force for an output of 500 thousand tires is decreased almost three times.

Automation sharply changes the relationship among groups of workers, a general tendency toward an increase in the number of repair personnel being noted. In highly automated chemical factories they constitute 38-50% of the total number of workers. The relative importance of engineering-technical workers is increased. Automation also requires a significant increase in the qualifications of those who control complicated apparatus and those who set it up and repair it. Now it is necessary to train those cadres who are able to set up and repair as well as operate the apparatus. The maximum effectiveness of automation is reached by increased volume of production and the rise in capacity of factories, shops, and aggregates which make possible the achievement of continuity of production processes.

The examples in the report show that with increased capacity and volume of production, the growth of the number of workers is slowed down. It was noted also that the introduction into production of control-measurement apparatus leads to an increase in the requirement for electrical energy. However, the economy obtained in this from the increase in the productivity of labor exceeds the additional expenses for electrical energy.

In the report of Ya. Fat (Budapest Technical University) on the example of machine-building and other enterprises some results of the mechanization and automation of production were generalized. To obtain the maximum effect here it was necessary to determine carefully the direction of mechanization and automation in agreement with the requirements of the production plan. The author deems it necessary, in addition to calculation of the production-financial condition of the enterprises also to take into account the possibility of unification and standardization of parts and the specialization of factories for the purposes of mass production, which ensures the fullest utilization of equipment.

In determining the effectiveness of mechanization and automation, one must take into account not only the savings in live labor but also the expenditure of raw materials, the quality of production, and the degree of capital investments. It is necessary to compare capital expenditures, additional expenditures with respect to exploitation, all expenditures for wages, and the full term of turnover of capital investments with relation of all these indices to one freed worker.

Ya. Auerkhan (Institute of Economics Academy of Sciences of the Czechoslovakian Republic) feels that full realization of the tremendous potential possibilities of automation is achieved only in the conditions of a socialist society. He brought out data regarding the increase in the productivity of labor in Czechoslovakia, thanks to automation, and emphasized that it not only assists in shortening production time, speeds the turnover of working resources, and makes it possible to increase the quality of production, but it also ensures the job security of workers.

In the report it was also noted that the maximum effectiveness of automation may be achieved with the simultaneous development of typification and unification of production, parts and technology, with the increase in the flexibility of automatic equipment and the introduction of those automated aggregates which make it possible quickly to make the transition from production of one kind of product to another. The author emphasized that for the development of automation of production in Czechoslovakia, the extension of international division of labor would have great significance.

The report of I. Shalomon (Ministry of Metallurgy and Machine-building of the Hungarian Peoples Republic) concerned the characteristic of the basic ways and factors in increasing the productivity of labor applicable to vacuum-technical production in Hungary. He noted that in assembly work in vacuum-technical production, a large role is being played by the breakdown of assembly by sub-assemblies (uzel) with group payment of labor of the special brigades occupied in this work. Increasing the productivity of labor was assisted also by new methods of controlling production which made it possible for enterprises to show greater independence while preserving the principle of centralized control.

Increasing the effectiveness of scientific-technical work was regarded as one of the factors in the growth of labor productivity in the report of Ya. Klar (Scientific Institute of the Budapest Technical Institute). In the opinion of the author, the correct selection of the object and method of investigation has great meaning for the effectiveness of scientific investigations. This makes it possible to bring out individual talents in collective work the conjugateness and proportions between basic and applied scientific investigations. It is important also correctly to organize the work and the division of labor among scientific, educational, and production organizations preliminarily to evaluate the expected results according to the different phases of

the work and the possibilities of their practical application. It is efficacious materially to encourage workers, depending on the results of the investigation.

A number of reports of leaders of the largest enterprises in Hungary were devoted to the question concerning ways and factors in the growth of labor productivity.

Considered at the conference were questions having to do with the determination of the concept and content of labor productivity, methods of its measurement and planning, and questions of the economy of materialized labor.

Academician F. Berens (Berlin Institute of Economics) noted that the reason for slow solution of questions related to the measurement of labor productivity is the defining of the boundary between labor productivity statistics and cost price statistics. The period of transition from socialism to communism is characterized by the development of goods-money ratios; therefore, it is necessary along with various methods for measuring labor productivity to occupy oneself also with commensuration of value or cost price. The productivity of labor reflects the degree of effectiveness of live labor, and of expedient concrete labor. From here it follows that it is incorrect to view the index of labor productivity as an index of the cost not only of live but also of materialized labor. As long as goods production exists and the double character of labor exists, it is not possible to figure directly in working hours the cost of live and materialized labor even with the aid of electronic computers.

Commensuration of the cost of live and materialized labor can be done while comparing the index of labor productivity and the index of value or cost price but not by way of "inclusion" of materialized labor in the index of labor productivity. The statistics of labor productivity and the statistics of the effectiveness of live labor should be supplemented with the statistics of cost price, which reflects in a money expression the expenditure of the most important elements of materialized labor. At the present time calculation of the productivity of labor and of cost price is done according to various inadequate types of production, according to various prices, which makes difficult their comparison.

On the basis of the analysis of cost price and of the correlation of the growth of labor productivity and of average wages, it is possible to arrive at a result for the relative growth of net return and the movement of net cost.

G. Rikhter (Leipzig K. Marks University) expressed another opinion on this question. He reckons that Marks never limited the increase of labor productivity only to the saving in live labor. A rise in the productivity of labor is achieved then when the saving in live labor is greater than the increase in expenditures of past labor. But at the present time the expenditures of live labor are figured in hours, but those of materialized labor in money. Therefore, in calculation of the productivity of labor changes in the cost of materialized

labor are not taken into consideration and are limited only by control of the changes in the cost of labor as a whole through cost price. However, cost price does not include all costs of labor and its movement does not always coincide with the movement of the productivity of labor. The productivity of labor in some other aspects was looked at in the report of Z. Tlustý (Institute of Economics, Academy of Sciences, Czechoslovakian Republic). He investigated the problem of the measurement of the combined cost of live and materialized labor and considers it incorrect to measure the productivity only with respect to the cost of live labor and with respect to the costs of all social labor which has taken part at various stages in the production of a given product. Only those measurements in the costs of live and materialized labor which come out of a given part of the production should be considered. Measurements having to do with changes of the productivity of labor in adjacent branches should not be considered. The author proposed to apply prices which in the maximum way would be approximated to the value.

In the report of A. Vorob'yev (Institute of Economics Academy of Sciences USSR) the increase in labor productivity was seen as any change in the labor process which shortens working time socially necessary for the production of the product - it is identical to the lowering of general labor costs (live and materialized). The productivity of live labor is determined not only by its qualitative side but also by its equipment with technical and material means. The growth of labor productivity is expressed in the requirement in unit time of the greater mass of the means of production. In the conditions of a socialist economy the commensuration of the costs of live and of past labor is especially important. This does not exclude in various cases the necessity to measure labor productivity only with respect to the cost of live labor. However, it is impossible to use only this index in evaluating the effectiveness of technical progress. Along with searches for methods of calculating labor productivity with respect to the contiguous costs of live and past labor, it follows for the analysis of the cost of materialized labor to apply natural and value indicators which reflect the use of the means of production and their value.

Further, the tendencies for measurement of the correlation of live and past labor, ways and methods of the saving of materialized labor and economic problems arising in connection with this were further surveyed in detail.

In considering the question of the content of the concept of labor productivity the point of view of Prof. Berens was not supported. All the conference participants emphasized the necessity of increasing attention to the costs of materialized labor and the necessity to consider them in the analysis of labor productivity. Various methods of measuring the costs of materialized and of all contiguous labor were proposed (by evaluating in work units with the application of

mathematics, in the assistance of the value index of net production on which any measurements in costs of materialized labor exert influence in inverse proportion, by means of the balance of branch connections, and, finally, on the basis of natural indicators of the utilization of raw materials and productive capacities and also of the data of cost price).

Problems of international commensuration of the levels of labor productivity had a large place in the work of the conference.

In the report of A. Balek and A. Chervený (GSU of the Czechoslovakian Republic) these questions were surveyed with Czechoslovakia as an example. Tasks levied in the area of competition with capitalist countries and also in the area of economic cooperation of socialist countries require mutual development of methods of more precise commensuration of labor productivity in different countries. Comparison of levels and rates of growth of labor productivity can be made with respect to branches of the economy, branches of production, different enterprises or types of production. Comparison according to single selected groups of products can be done in a value expression that requires the application of identical prices for evaluation of production with relation to an identical circle of workers. It is possible also to use the method of calculation with respect to gross and to net production. The authors describe in detail the first method, having emphasized the importance of the correct selection of the products compared or of their groups so that they should represent proportionally all the basic branches of the different countries. In this a number of questions arise. How for example to bring to a common denominator a difference in quality of production and quality of work, since for evaluation a single price is used? This can be done by establishing for each country individual average prices proceeding from the unit cost. The various prices obtained in that way for different countries should express a difference in the quality of production. This is especially important for machinebuilding. For similar types of production (coal, ore and others) it is necessary to figure the price for conventional units (1,000 calories, a ton of pure metal and so on). The influence of natural factors should be isolated, otherwise the calculations lose their value as a base for international comparison of the levels of labor productivity. It is more complicated to take into account the influence of climate or territory.

It is necessary also to resolve the questions having to do with prices and differences in the movement of the value of products with a great assortment (spare parts and so on). Here, clearly, it is necessary to work out special coefficients of evaluation proceeding from correlation of prices inside the country, but this does not rectify the influence of a different production structure. It is proposed also to use a coefficient of evaluation with respect to the production structure of each country and after that to calculate an average coefficient. In this it should be kept in mind the different conditions of



the formation of retail and wholesale prices in socialist and capitalist countries.

For calculation of the influence of a different branch structure of production, it is necessary to select correctly production groups corresponding to the actual structure. In figuring out the labor productivity a similar circle of workers should be compared honoring also the difference in the length of the working day, vacations, holidays, and so on. To determine the differences in labor organization, it is possible to use a comparison of such indexes as the ratio of engineering technical workers, of administration, of qualified workers, of specialists with higher and with middle education, to the overall number of workers, the equipping of production with calculating machines and so on. Another criterion for determining the level of organization may be the assortment, amount of specialization and cooperation, typification, normalization and unification, changeability, demurrage, and so on. In comparisons it is necessary carefully to look into the definition of terms ("worker - Rabochiy," "Employee - sluzhashchiy") and so on).

The authors also acquainted the conference participants with how at the present time the plan is established and controlled and with how the productivity of labor is measured statistically in Czechoslovakia.

Z. Roman (TsSU of the Hungarian Peoples Republic) reckons that for comparison of the levels of labor productivity of socialist countries it is possible to apply those same methods as also are applied for internal purposes, while using all the indexes. In the opinion of the author the calculation of the costs both of live and of materialized labor is absolutely necessary. The first problem which arises in this regard is the necessity to achieve comparability of products with respect to quality which is especially difficult to do in machinebuilding. Difference in quality should be eliminated either with the aid of the selection of groups being compared or the application of coefficients. The second problem is the reflection of an identical circle of expenditures for labor with respect to an identical circle of productions processes. Here it is necessary to figure an identical degree of participation of auxiliary production and also the volume of cooperative supplies. The third problem consists of the reflection of the influence of the production structure in the comparison of overall industrial and of branch data. Z. Roman reckons that in this case it is necessary to give preference to comparisons according to types of production in physical units for this makes it possible to obtain indices of a continuous character and does not require comparability of prices.

The calculation of productivity with respect to expenditures for live and transferred labor present a more complicated problem. It is possible to solve it with the assistance of a calculation of net production per working hour inasmuch as the saving in materialized

labor is proportionally reflected in the indicator of net production. But the index of net production is an index of changing makeup and depends on prices.

It is possible in comparison of labor expenditures with respect to different kinds of production to figure in nature also the costs of the means of production and to obtain a combined index to apply to this a money evaluation with respect to identical prices. A broader aspect of the comparison will give an account of net costs of different kinds of production, but in this it is necessary to figure the influence of prices. It is possible to apply the method of evaluation of transferred costs in units of working time, but only with the assistance of electronic machines, and also to compare costs of materialized labor by means of the balance of inter-branch connections.

Practically the index of the production of products per worker in a natural expression which can be obtained on the basis of published data from official statistics is more often used. However, these comparisons can be related only to branches with the same kind of product and they have therefore narrow significance. Utilizing this method the TsSU of Hungary performed calculations of the comparison of the levels of labor productivity with respect to 12 branches with the same kind of product in Hungary, in the USSR, and in Poland, with respect to 1955 data.

The most attention at the conference was allotted to methods of measuring and planning the productivity of labor.

In the report of A. Khlebovchik (Institute of Economics Academy of Sciences Polish Peoples Republic) a methodology for the investigation of intra-branch and inter-branch differentiation of the levels of the labor productivity figured in physical units which had been developed by him was revealed, and also brought out were some results of scientific work of the period 1953-1956 embracing 24 branches with a more or less identical product profile. The departure point of the investigation was a determination of the level of labor productivity in a given year at a given enterprise which was taken as separate from the division of the year's production, taken in physical units, for an average yearly number of workers engaged or the number of worked-man-hours by workers of the industrial group and the further comparison of this level with the average labor productivity achieved in a given branch of industry.

Thus was obtained the possibility of grouping enterprises with respect to the rising or falling (in relation to the average level) of labor productivity in the branch. This in its turn makes it possible to group enterprises in corresponding varied series of productivity. Subjecting the varied series obtained to mathematical analysis the author demonstrated the possibility of differentiations: of inter-branch levels of labor productivity - with respect to different enterprises, of the levels of labor productivity - with respect to the portions of branch production, and so on.

In the report of O. Lukach (Hungarian Peoples Republic) there was revealed the existence of a method of direct measurement of labor productivity in which its level is determined in the first place with respect to the types of production, on the basis of the cost of working time (worked manhours), which is arrived at for unit production; the change of labor productivity between different periods or the level of productivity between different enterprises (countries) is figured with respect to types of production by a comparison of these indexes; the average change (dynamics) of the level of labor productivity, for example, with respect to enterprises is determined by calculation of the average-weighted relative numbers indicated above (that is of a constant makeup).

One of the properties of that method is that in comparison between different periods or countries it is not required to convert to an identical level of prices.

Comrade Lukach characterized in detail the problems arising in the use of this method, namely: separation and determination of costs per unit of production, comparability of products, the possibility of determining the average measurement by means of a different weighing, and showed the way to resolve these problems. Then he analyzed in detail the practice in application of indirect measurement of labor productivity in Hungary.

L. Olle (Hungarian Economic University imeni K. Marks) figures that at the present time all studies with respect to calculation of labor productivity always have in view labor expended on a definite sector of production that reflects the effectiveness of live labor. But the lowering of live labor costs per unit of production signifies a growth of labor productivity only if it leads also to a lowering of combined labor costs embodied in the product. The author proposed a scheme of indicators of labor productivity which includes gross-, net-, and mixed- indexes. The gross-index reflects the level of productivity of combined labor embodied in the product both of live and of transferred labor. It is determined by the formula:

$$\frac{c + v + m}{t_h + t_e}$$

The net-index of labor productivity is obtained by comparing labor costs of the unit of observation being investigated (of live labor) with a new value created by it, that is, with net production:

$$\frac{v + m}{t_e}$$

The mixed indicator is determined by dividing gross production by expenditures of working time in the area of production being investigated (costs of live labor):

$$\frac{c + v + m}{t_e}$$

where  $c$  is the cost of materialized labor or the value of the means of production;  $v + m$  - the newly created value or net production;  $c + v + m$  - gross production;  $t_h$  - costs of working time of preceding labor processes;  $t_e$  - costs of working time of the unit of observation (of the given process).

The gross-index as a rule is not used in statistical practice since we are not able to perform the calculation of the quantity of materialized labor in working time which is embodied in the product, and, also, in connection with the fact that the possibilities of using these indexes is extremely limited. Just what indexes can be used so that it is possible to form net-indexes of labor productivity?

The author figures that utilization of the index of net production has evident advantages in the investigation of labor productivity both from the theoretical and from the practical points of view. In figuring net production, however, a number of difficulties arise. In particular, for the index of net production (and labor productivity) the different profitability of different kinds of production has an essential influence. The difficulty in calculating net production in the practice of statistical organs of Hungary is related also to the figuring out of price indexes for materials and to the formation of indexes for short periods.

As regards the indexes of mixed-indexes of labor productivity, in some cases they closely reflect the change of labor productivity in the branch of industry being studied, but in the majority of cases they do not satisfy the requirements put to them. Therefore, says the author, from the theoretical point of view for study of labor productivity in different wide spheres of industry, net-indexes calculated on the basis of net production are the most suitable.

N. Shvarts (Rumanian Peoples Republic) said that in Rumania the labor requirement indexes are used in the tobacco and perfume industries, in the production of ball bearings, in the rolling industry, and in other branches of industry. Figuring industrial labor requirements is done with respect to basic and secondary sectors; labor costs with respect to them are measured differently. Labor costs are further determined for works and services and the change of incompleting production. Such a calculation leads to this: the labor requirement index can become an index of labor productivity.

In considering labor requirement indexes at the conference various proposals about the use of factual, normative labor requirements, concerning the development of stable labor requirements were introduced.

In the presentation of M. N. Demchenko (Institute of Economics Academy of Sciences USSR) of the experience which had been shared of the use of labor requirement indexes in the USSR, there was brought out

a grouping of labor requirement indexes; formulas were demonstrated, showing the order of calculation of different kinds of labor requirements, and the importance of calculation of the labor requirement of gross production was emphasized.

At the conference a proposition about the efficacy of measuring labor productivity per worker of the enterprise was supported, and also there were introduced proposals to figure per accomplished worker the output, the hourly and daily output and so on. Participants in the conference considered that the aim of the calculation and planning of labor productivity must be the discovery and use of sources of its growth. Therefore, considerable attention was given discussions concerning methods for planning labor productivity which can be divided into two groups: future and current planning. In considering the use of these methods there arose the question of the possibility of determining rates of growth of labor productivity with respect to its growth factors.

D. Tsukor (Institute of Economics, Academy of Sciences, Hungarian Peoples Republic) in his report dwelt on the tasks and difficulties in future planning of labor productivity. He indicated that the primary index for planning should be the index of average labor productivity, and disputed the possibility of using indexes of the labor requirement of articles for planning. Considering it admissible to plan productivity of labor with respect to the factors, Comrade Tsukor brought out the following groupings of the most important groups of factors for planning: a) technical level, b) use of capacities, c) worker qualifications (the quality of the labor force), d) social and public factors, e) natural factors.

Having taken that sufficiently enlarged group of factors, Comrade Tsukor investigates the possibilities of determining their influence on the growth of labor productivity and comes to the conclusion that to plan a change of labor productivity with a calculation of the factors which have an influence on productivity is possible only with respect to branches of industry in the first place where the production profile, structure of production, and methods of production are the same. Comrade Tsukor confirmed in his report that any future planning contains in itself some elements of extrapolation, that is, it derives from the growth of labor productivity of previous periods. He considers that it is impossible to recognize as proper that method of planning in which current data are taken as the departure point for planning and are subjected to correction in the future.

In the report of M. Pika and K. Gopp (Gosplan of the Czechoslovakian Republic) the plan of growth of labor productivity was shown as a form of balance, in which the growth of labor productivity is balanced by the means of its accomplishment. The authors regarded it as necessary to examine the regularity between the growth of labor productivity and the growth of technical and power equipping of labor.

They figure that labor productivity is found partially in the direct dependence on the growth of the technical equipping of labor, the provision of workers with basic funds, for example, basic machine funds. The growth of labor productivity depends first of all on the measures of use of this technology, that is, on the combination of all the remaining factors of the growth of labor productivity which are related indirectly to the growth of technical equipping (the level of organization of production and of labor, the initiative of workers, and so on).

If it is possible to figure a fuller use of technology then the growth of labor productivity in a known degree can be achieved without raising the general technical equipment of labor (for example, on the basis of fuller use of technology on the base of increasing changeability, the series nature, continuity of production and so on). Consequently, the more resources are uncovered in an achieved level of the use of technology, the less it is possible to present requirements to the growth of technical equipment of labor for the achievement of a defined overall growth of labor productivity.

The authors figure that as yet only in an insignificant degree have been expressed the resources of the growth of labor productivity which come from the formation of a world socialist system and which are based on international division of labor. Realization of these resources in the future would make it possible more effectively to use technology to achieve in a definite growth in the technical equipment essential growth of labor productivity. One of those resources is the specialization of the production of countries - of the participants SEV.

At sessions of the agricultural section the following workers of the Institute of Economics of the Hungarian Academy of Sciences were heard giving reports: Z. Kelemen, K. Zibenfroyd, L. Khorvat, worker at the Institute of Economics of the Bulgarian Academy of Sciences, Professor P. Kiranov, Director of the Hungarian Institute for the Organization of Agriculture, D. Latkovich, worker at the Statistical Directorate GDR G. Vinkel'man, representative of the Scientific Institute of Agricultural Enterprises of the Hungarian Academy of Sciences, L. Chete, and others. In the reports were surveyed the dynamics, indexes, methods of planning and calculation, international comparisons of the level of labor productivity in agriculture as a whole and applied to the conditions of agricultural cooperatives or state economies of the countries of the socialist camp.

With respect to a number of questions participants of the section expressed the identical opinion, in particular concerning the necessity to establish the index of labor productivity in planning and evaluating the work of agricultural enterprises; concerning the desirability of the further development of the cooperation of scientific and practical organizations of the socialist countries in the working out of methods of calculation and planning of this index; concerning the necessity to apply coefficients of equivalency, reevaluation of production in livestock raising, ploughing, and other agricultural work for

the purpose of summing the whole volume of production. Besides this it was recognized as efficacious to figure the labor productivity with respect to branches and to works. For calculations of labor productivity within economies with respect to branches and sectors, it was recommended to apply the indexes of expenditure of working time (with respect to branches of labor) per unit of production. For expression of the influence on labor productivity of different factors, it was proposed to apply linear programming. The wish was expressed that statistical control of socialist countries would organize selective calculations and investigation of labor productivity with respect to different economies.

Considered also was the question of the evaluation of applicability of different indexes of labor productivity (with respect to gross, net, and natural production, and others) to different conditions. The majority of conference participants spoke out in favor of the application of the whole system of these indexes. The relationship of labor productivity and fruitfulness (productivity of the soil) was disputed. Different opinions were expressed relative to the priority of the use of these indexes. Especially widely discussed was the question of the effectiveness of the intensification of production from the point of view of labor productivity.

The conference proceeded in very friendly, comradely circumstances; it assisted the development of cooperation between workers in the economic science of socialist countries.

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